

1093113

**4. 510(K) SUMMARY OF SAFETY AND EFFECTIVENESS**

**Submitter**

DEC 18 2009

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E-mail: ..... Andreas.Petermann@Straumann.com  
Date: ..... September 25, 2009

**Name of Device**

Proprietary Name: ..... etkon™ es1  
etkon™\_visual  
Straumann CARES  
Classification Name: ..... Optical Impression Systems for CAD/CAM  
Endosseous Dental Implant Abutment  
Common Name: ..... 3D Dental Lab Scanner  
Dental Restoration Design Software  
Dental Abutment

**Predicate Devices**

Straumann Computer-aided Restoration.... K061277  
(C.A.R.E.S.) Ceramic Coping  
Straumann NN CARES..... K082545  
Titanium and Ceramic Abutments  
Straumann WN CARES..... K082764  
Titanium Abutment  
P.004 NC CARES..... K081005  
Titanium and Ceramic Abutments

P.004 RC CARES.....K072151

Titanium and Ceramic Abutments

Straumann Computer aided.....K052272

Restoration Service

Procera® Software .....K053602

Nobel Biocare AB

#### Description for the Premarket Notification

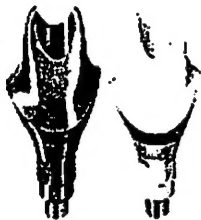
etkon™\_visual is a software package by Institut Straumann AG which allows for digital design of customized abutments.

etkon™\_visual is also the operating software that controls Straumann's scanner etkon™ es 1. The scanner etkon™ es 1 together with the application software etkon™\_visual fall under the definition of 21CFR872.3661, Optical Impression Systems for CAD/CAM. Such systems are defined as class II devices which are exempt from 510(k) requirements.

This 510(k) premarket notification submission describes etkon™\_visual's dental abutment design functionality.

For designing a dental abutment, the etkon™ es 1 scanner collects data from a dental plaster model with a scan body attached intended to provide for the correct positioning of the abutment. The scanning is done extraorally. The scan data is used by the etkon™\_visual software design tools to virtually design the shape and size of the dental abutment. Once the design process is finished, the digital dataset is sent to Straumann by internet connection for CAM manufacturing from milling blanks.

The individual abutments that are finally manufactured at Straumann from zirconium dioxide and titanium blanks meet all properties and specifications of Straumann's already 510(k)-cleared individual abutments ("CARES") as listed above in the "Predicate Devices" paragraph.



Verification and validation efforts of etkon™\_visual provides evidence that design parameters for the individual abutments are met and that dental abutments meeting design specifications are manufactured by Straumann.

In its functionality, etkon™\_visual is substantially equivalent to Nobel Biocare's Procera® Software.

In summary, it can be concluded that safety and effectiveness requirements for etkon™\_visual for the design of individual dental restorations including abutments are completely met.



Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room - WO66-G609  
Silver Spring, MD 20993-0002

Institut Straumann AG  
C/O Dr. Andreas Petermann  
Head of Regulatory Affairs  
Straumann CAD/CAM GmbH  
Lochhamer Schlag 6  
Graefelfing, Bavaria 82166  
GERMANY

JUN 23 2010

Re: K093113

Trade/Device Name: Etkon\_Visual  
Regulation Number: 21 CFR 872.3630  
Regulation Name: Endosseous Dental Implant Abutment  
Regulatory Class: II  
Product Code: NHA, NOF  
Dated: September 25, 2009  
Received: October 1, 2009

Dear Dr. Petermann:

This letter corrects our substantially equivalent letter of December 18, 2009.

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to

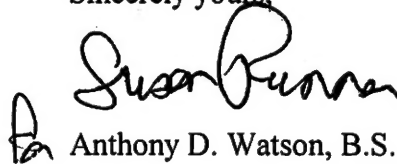
<http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,



Anthony D. Watson, B.S., M.S., M.B.A.  
Director

Division of Anesthesiology, General Hospital,  
Infection Control and Dental Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known):

Device Name:

etkon\_visual

Indications For Use:

etkon\_visual is a software device intended to import patient-specific data from a scanner for CAD (computer aided design) design of individual dental restorations like crowns, bridges, inlays, onlays, veneers and abutments.

etkon\_visual also facilitates the transfer of 3D data from a dental lab to a remote milling center by internet connection and serves as an order management tool.

Prescription Use ✓  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Robert D. S. for Dr. K.P. Muly (Acting)  
(Division Sign-Off)

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Division of Anesthesiology, General Hospital  
Infection Control, Dental Devices

510(k) Number: R'093113